

Darwin in the press: What the Spanish dailies said about the 200th anniversary of Charles Darwin's birth

Esther Díez, Anna Mateu, Martí Domínguez

Mètode, University of Valencia, Valencia, Spain

Resum. El bicentenari del naixement de Charles Darwin, celebrat durant el passat any 2009, va provocar un considerable augment de l'interés informatiu de la figura del naturalista anglès. En aquest article s'analitza la cobertura informativa d'aquest aniversari en onze diaris generalistes espanyols, i s'estableix *grosso modo* quines són les principals postures de la premsa espanyola davant de la teoria de l'evolució. D'aquesta anàlisi, queda ben palès com el creacionisme és encara molt viu en els mitjans espanyols més conservadors.

Paraules clau: Charles Darwin · ciència vs. creacionisme · tractament informatiu científic

Summary. The bicentenary of Charles Darwin's birth, celebrated in 2009, caused a surge in the interest shown by the press in the life and work of the renowned English naturalist. This article analyzes the press coverage devoted to the Darwin Year in eleven Spanish daily papers during the week of Darwin's birthday and provides a brief synopsis of the positions adopted by the Spanish press regarding the theory of evolution. The analysis makes very clear the relatively strong support for creationism by the conservative press in Spain.

Keywords: Charles Darwin · science vs. creationism · scientific news coverage

"The more we know of the fixed laws of nature the more incredible do miracles become."

Charles Darwin (1887). *Autobiography*

The theory of evolution: 150 years of controversy in Spain

The publication of Charles Darwin's *On the Origin of Species* in 1859 was a turning point in history. According to the biologist and science historian Michael Ghiselin [4], Darwin's theory represents the most important revolution since Copernicus. Just as Copernicus and Galileo toppled the geocentric world forever, so Darwin sank the rational underpinnings of any kind of anthropocentrism. After Darwin, it became very hard to claim to "Being chosen by Creation", just as after Copernicus our planet was no longer the center of the universe. Stated very simply, dissemination of the idea of natural selection began to dismantle the "old argument for design in nature" advocated, for example, by Reverend William Paley, and led many to question their previously unassailable belief in the Bible [11]. The serious and seemingly insurmountable conflict that followed, between science and religion, has continued in differed forms into the present [1,8].

In this article, we examine to what extent and in what form this controversy persists in Spanish society, focusing on the print media's response to the celebration, in 2009, of the 200th anniversary of Charles Darwin's birth. To do so, we have analyzed how the Darwin Year, specifically, during the week of his birthday, February 12th, was presented in the general Spanish press, paying particular attention to its portrayal of the conflict between the theory of evolution and religious beliefs. In addition, we look briefly at the views expressed by several newspaper columnists with respect to their newspaper's editorial line [3,9].

In Spain, the roots of the "science versus creationism" debate can be traced back to the mid-19th century, when the cultural magazine *La Abeja* popularized evolutionary theory [7]. At the same time, however, *El Museo Universal* ridiculed Darwin's ideas, publishing numerous derogatory articles and satirical caricatures of the English naturalist. The most virulent outbreak of the controversy came with the arrival of the Glorious Revolution of 1868, when the new ideas about evolution began to circulate freely and were supported by many scientists publicly. The debate even sparked the interest of the commercial sector, which tried to take advantage of it to attract greater public interest in their products and to increase advertising revenues: the best example is perhaps that of *Anís del Mono*. This brand of liquor became a huge success by using a label with a caricature of an ape-man who, according to some authors, might even have represented Darwin himself [6]. The controversy sparked by the dissemination of Darwin's work was unstoppable, despite government action [5,10], as evidenced by the nature of the coverage of Darwin's theory in publications such as *La Ilus-*

tración Española y Americana, Revista Contemporánea, La Unión Católica, El Cronicon Científico Popular, El Imparcial, El Mercantil Valenciano, Revista Europea, and La España Moderna. In the intense debate, Darwin’s ideas were often misrepresented, which ultimately had the effect of delaying the translation of his *On the Origin of Species* and other works. In fact, at the start of the 20th century only five of the 17 works by Charles Darwin had been translated into Spanish [2].

The long and provocative conflict between Darwin’s ideas and their interpretation, on the one hand, and religion, on the other, has been fought out over the years in the Spanish press. This led us to examine, 150 years after the publication of *On the Origin of Species*, the current form this controversy has taken in the mainstream Spanish media.

Charles Darwin’s bicentenary in the Spanish press

To study Spanish newspaper coverage of the 200th anniversary of Darwin’s birth, eleven newspapers from different regions and representing different political viewpoints were selected: *El País*, *El Mundo*, *Público*, *ABC*, *La Razón*, *La Vanguardia*, and *Diario Ya* at the national level, and *Las Provincias*, *Levante-EMV*, *El Diario Vasco*, and *El Norte de Castilla* at the regional level. The average circulation of each of these newspapers exceeds 40,000 copies, except for *Diario Ya* (edited on-line), for which no data were available. The dates selected for the study encompassed the period between the 7th and 15th of February, 2009. Although, as noted above, Darwin’s date of birth is February 12th, we deemed it appropriate to extend the analysis to encompass the weekends before and afterwards, in order to enlarge the scope of the study.

Our research specifically focuses on the content of the chosen newspaper articles as well as their formal aspects (position in the newspaper and author). The content was analyzed as to whether it was informative or interpretive and with respect to the chosen theme, the bibliographic sources used, and the author’s position on the theory of evolution.

The results of our study showed obvious differences between newspapers in the coverage of the bicentennial, especially in the number of articles each one allocated to it. As seen in Table 1, the newspapers that devoted the most articles to the historical figure of Charles Darwin were *Público* (9 items) and *El Mundo* (8 items), likely reflecting the fact that both newspapers have a science section. Moreover, *El Mundo* also published a special section on the naturalist in their on-line version. These two newspapers were followed by *ABC*, with seven articles, three of which were published in its religious supplement, which dedicated a special issue to Darwin and his ideas, as discussed below.

The examined items included both feature and opinion articles. The former were most often located in the science section of those newspapers that have one, such as *Público* and *El Mundo*, while in the others they appeared either in sections on society or culture, or, as in the case of *ABC*, in the religious supplement.

There was great variety with respect to the authors of the articles, as most of the newspapers examined assigned coverage either to journalists who usually concern themselves with

Table 1. Number of newspaper items published on 7–15 February whose subject was the historical figure of Charles Darwin

Newspaper	Number of news items
Público	9
El Mundo	8
ABC	7
La Vanguardia	5
El País	4
Diario Vasco	4
Las Provincias	3
El Norte de Castilla	3
Diario Ya	2
La Razón	2
Levante-EMV	1

reporting science news or to foreign correspondents, who mostly reported on the view of the Darwin Year in the USA, or to biologists, researchers, physicians, philosophers, theologians, and priests, as guest contributors.

The focus of the articles was greatly influenced by the current nature of the dispute between evolutionary theory and religion. Additional points of interest were the implications of “social Darwinism” and recent scientific advances, with evolution as the backdrop. Of course, the newspapers also recalled the details of Darwin’s biography and the social environment in which he lived and worked.

Analysis of the newspapers

The daily *Público* was noteworthy for its moderate and disciplined tone. It drew on a variety of sources, including renowned scientists in the field of evolution and other, related scientific fields. In this newspaper then, the scientific arguments were much more prevalent than in any of the other newspapers studied. This reflects the strong influence of the newspaper’s science section, i.e., more thorough reporting and a higher level of expertise than found in the other publications examined. To address the controversy between science and religion, *Público* chose, on the one hand, to recount the creationist argument first-hand, publishing interviews with members of Christian organizations that advocate creationism, as well high-profile individuals actively involved in disseminating the creationist viewpoint. On the other hand, it reported, for example, on a Spanish school where teachers of religious education have defended the teaching of evolution. The newspaper sought to maintain a neutral and distanced position, directly quoting those who were interviewed and thereby avoiding the need to judge the merit of their arguments. For example, quoting the theologian and biologist M. Á. Friale:

"[In the words of M. Á. Friale], [...] having come so far, you cannot deny that evolution has existed, but science has limitations and only religion gives us the ultimate reason for things, where science cannot reach."

David Bollero, «Mi padre no eres tú, es Dios» (You aren't my father, God is). *Público*, 14 February 2009.

However, the same article, lacking a source, made the following statement: "Surprisingly, the predominance of science over religion, in terms of teaching hours, disappears in the Baccalaureate." In some cases, the newspaper openly defended the theory of evolution against misuse for non-scientific purposes:

"Few historical figures have been manipulated so much as this scientist has, and few doctrines have been misrepresented as much, either by ignorance or with the intention of serving interests other than Science."

Javier Yanes, «Lo que Darwin nunca dijo» (What Darwin never said). *Público*, 11 February 2009.

The newspaper *El Mundo* also extensively covered Darwin's work and recounted in detail the hardships the naturalist suffered throughout his lifetime. The information contained in the various articles was of high quality, consisted with the high standards of the newspaper's science section. Numerous historical figures and studies of the epoch were referred to whereas references to the debate between evolution and creationism was scarce; however, in article it was noted that Darwin considered himself agnostic and, therefore, to use his work as a banner for atheism or against creationism is unjustified. The on-line special issue of *El Mundo* dealt with the issue in greater depth:

"[...] Darwin's faith crumbled on facing the accumulation of evidence which contradicted all the allegedly unquestionable Truth in the Book of Genesis."

Pablo Jáuregui, «Darwin vs. Dios» (Darwin vs. God). *El Mundo*, Special issue «Darwin. El padre de la Evolución» (Darwin. Father of Evolution) [on-line], February 2009.

In *El Mundo*, we find numerous and substantial references but no first-hand statements from those advocating the theory of evolution, in contrast to the articles in *Público* or, as discussed below, *La Vanguardia*. *El Mundo* offered an obvious defense of the theory of evolution and was critical of the opposing positions, which it branded as "fundamentalist":

"With the arrival of George W. Bush to power in January 2001, Science became suspect once more, and Religious fundamentalism was echoed not only in the pulpits, but also in the media, museums and schools."

Carlos Fresneda, «La "cruzada" contra Darwin» (The "crusade" against Darwin). *El Mundo*, Special issue «Darwin. El padre de la Evolución» (Darwin. Father of Evolution) [on-line], February 2009.

Nonetheless, the special issue also allotted space to a voice seeking to reconcile science and religion, José Manuel Vidal, the paper's expert on religion:

"What a Christian cannot consent to on any level is a purely materialistic evolutionism, which does not explain the essential difference between man and all other inferior beings."

José Manuel Vidal, «Un ateo blasfemo» (A blasphemous atheist). *El Mundo*, Special issue «Darwin. El padre de la Evolución» (Darwin. Father of Evolution) [online], February 2009.

Within its news pages, *ABC* has generally treated evolution as a valid theoretical model deserving of serious consideration. However, during the study week, while the newspaper explained the basics of evolution to its readers, its greater focus was on Darwin's life. Thus, it took a more social approach, as opposed to the more scientific one of *El Mundo*. Quite another case was the Catholic supplement *Alfa y Omega*, published by *ABC*, which fiercely criticized evolution. Indeed, articles on the subject carried the following headlines: «No hay evolución sin creación» (There is no evolution without creation) (12 February 2009), «Evolución y fe compatibles» (Evolution and faith are compatible) (12 February 2009), and «Un pensamiento de Dios» (A thought of God) (12 February 2009). The supplement itself was entitled "God also created Darwin," which clearly exposes the supplement's dogmatic position towards Darwin's work. However, unquestionable support for creationism was found only within the text written by the philosopher José Ramón Ayllón:

"Darwin himself never fully accepted the idea that a structure as complex as the eye could have evolved by the causal accumulation of favourable mutations."

José Ramón Ayllón, «No hay evolución sin creación» (There is no evolution without creation). *ABC*, Catholic supplement «Alfa y Omega», 12 February 2009.

His article revisited some of the classic arguments posed by creationists, such as the incompleteness of the fossil record. The author wrote: "divine causation [...] is necessary to give the very reason for living beings and their laws. Therefore, it does not substitute natural causes, nor oppose them".

The article «Un pensamiento de Dios» (A thought of God), written by an unnamed author, delivers a similar message. Moreover, and in contrast to other articles from different newspapers (incorrectly) referring to Darwin as an atheist, he is "the great English Catholic":

"He crowns his erudite irony when portraying Man as a product of evolution: 'Man - says the great English Catholic - is not a mere product of evolution, but rather of revolution'. God's revolution, who created him in his own image!"

Anonymous, «Un pensamiento de Dios» (A thought of God). *ABC*, Catholic supplement «Alfa y Omega», 12 February 2009.

The third article, although apparently more moderate and conciliatory, argues in favor of the existence of a Superior Being who created the universe with a purpose. This viewpoint is not surprising since the author is a priest and theologian:

"In essence, this is a question of common sense. Recently I was speaking to a young woman who possessed the most beautiful blue eyes, in which one could divine the depths of her soul ... Too much beauty to have come about by chance."

Jose Antonio Sayés, «Evolución y fe, compatibles» (Evolution and faith are compatible). *ABC*, Catholic supplement «Alfa y Omega», 12 February 2009.

El País was difficult to analyze overall, because the three articles it published discussing the controversy between evolution and creationism (a fourth article focused on the validity of evolutionary theory in the current study of medicine) were presented as opinions, with different authors, such that the perspective of each one was distinct. However, all three clearly supported Darwin's ideas, offering arguments that were similar albeit stylistically different. Each author backed up his view with referenced facts or figures. In addition to these opinion articles, an important—in the context of this study—article was published on 12 February 2009, the birthday of the naturalist. It appeared, unsigned, on the newspaper's editorial page as part of the in-house Op-Ed section «El acento». It can thus be maintained that this editorial represents the newspaper's stance on the theory of evolution, and it sided with the scientific theory as opposed to ecclesiastical tenets:

"To paint the theory of evolution as a duel between Darwin and Genesis, or between Scientists and Bishops, is inaccurate; because those who believed in Genesis were not only in the ecclesiastical hierarchy, but also the scientific orthodoxy of the era, including the young Darwin, who embarked upon the Beagle as an 'unpaid naturalist'."

«Darwin en política» (Darwin in politics). *El País*, 12 February 2009.

In his article «L'evolució de l'espècie» (The evolution of species, *El País*, *Quadern de València*, 12 February 2009), Joan Francesc Mira ironically defended Genesis for its ability to anticipate a "future history" of "fratricide, economic resources and sacrifices to appease the wrath of God." Wittiness aside, he described creationism as a "childish belief" as opposed to the theory of evolution, supported by "enlightened adults," and drew support for his pro-evolution opinion from paleontological findings.

The third of the three above-mentioned articles published by *El País* was written by one of us (Martí Domínguez). It offered an analysis of Darwin's religious beliefs, as described in his autobiography and censored by his family for years, and explained how the attitudes and convictions of Darwin's times long made him hesitant to publicize his ideas:

"All these [Darwin's] reflections, so simple, so reasoned, and putting God in an awkward position, were relentlessly censored by his wife, with the consent of his son Frank."

Martí Domínguez, «Darwin ateu» (Darwin the Atheist). *El País*, *Quadern de València*, 12 February 2009.

Unlike *El País*, the articles in *La Vanguardia* that dealt specifically with the debate between creationism and evolution appeared in the general news sections rather than in the opinion section, although there as well significant attention was paid to Darwin (including one directly linking him with the field of social sciences). Thus, it is clear that also in *La Vanguardia*, the controversy surrounding Darwin and his work was still deemed relevant, at least during the two-hundredth anniversary celebrations of the naturalist's birth. This is further evidenced by the newspaper decision to take an approach similar to that of *Público*, allowing proponents of creationism, specifically, the theologians Leo Bentley and Alfred Borthwick and Casey Luskin, a member of the Discovery Institute, to give voice to their ideas. However, in two other articles published by *La Vanguardia* about this controversy, the journalists took a less restrained tone, making their support for the theory of evolution clear:

"[Darwin's theory] has withstood the periodic battering by religious groups – above all in the United States – set to discredit it in order to justify their beliefs and increase their political support and influence."

[Rafael Ramos, «Darwin contra viento y marea» (Darwin against wind and high tide). *La Vanguardia*, 12 February 2009.]

This approach to portraying the controversy between evolutionary theory and creationism was complemented with a report from by *La Vanguardia*'s New York correspondent, Marc Basset. His article «El creacionismo adopta el manto del escepticismo» (Creationism adopts the mantle of scepticism), published on 12 February 2009, examined the challenges posed to Darwin's theory in the face of the strong support for creationism in the USA. "Why, does this world leader in science still pass off creationist ideas?" asked the author, who later explained the power of these ideas as follows: "The social and political power enjoyed by fundamentalists also explains why Darwinism is a matter of debate".

Neither *La Razón* nor *Diario Ya* devoted extensive coverage to the bicentenary of Charles Darwin's birth. The few articles published did not take a particular stance either for or against the theory of evolution. This, however, contrasted with the rather sensationalist headlines of *La Razón*, which on 8 February published an article entitled «El creacionismo resiste 200 años después de Darwin» (Creationism survives 200 years after Darwin), and on 12 February, «Disgusto a Darwin en su 200 aniversario: el hombre y el chimpancé no tienen parentesco» (Darwin's disappointment on his 200th anniversary: man and chimp are not related). Similarly, in *Diario Ya*, the headline of its 12 February coverage of a research report was: «Los humanos y los monos no son tan parecidos» (Humans and apes aren't

that similar). The same report was referred to by *La Razón* on the same day. Such headlines cater to the popular misconception that the theory of evolution advocates the idea that humans descended from apes, even though in the article appearing in *Diario Ya* the research report's author, Arcadi Navarro reassured readers that not only does his discovery contradict Darwin's theories, but it "reinforces, complements and adds nuances" to it as well.

Also on 12 February, *Diario Ya* published «Las aristas del darwinismo» (The flaws in Darwinism) by Carlos Gregorio Hernández. This text addressed "social Darwinism," linking Darwin's ideas to social theories such as eugenics and racism.

In *Las Provincias*, *El Norte de Castilla* and *Diario Vasco*, articles related to the bicentennial appeared in the general information section, as was the case in *ABC*, which also belongs to the Vocento editorial group. All three regional newspapers commemorated Darwin's anniversary with general news about his life and work, but none specifically analyzed the theory of evolution from a scientific perspective, unlike in other newspapers. However, the treatment was rigorous, without sensationalist headlines or obvious bias in terms of content, with the focal point being the validity of evolutionary theory.

Finally, in *Levante-EMV* only one article was devoted to the 200th anniversary of Darwin's birth. It consisted of a general examination of the many issues related to Darwin and his ideas. Thus, apart from linking his evolutionary theory with modern scientific discoveries and recounting the highlights of his life, the article credited him as responsible for "questioning the idea that God had created all life forms".

Discussion and conclusions

This study, which has examined the coverage by several Spanish newspapers of the 200th anniversary of Charles Darwin's birth, has shown that, generally speaking, the national press supports evolution and considers it, and Darwin's work as a whole, to be essential, in the arena of scientific knowledge and in human thought. Eight of the eleven papers reviewed, *El Mundo*, *El Diario Vasco*, *Las Provincias*, *El Norte de Castilla*, *Levante-EMV*, *Público*, *La Vanguardia* and *El País*, gave unwavering support to the theory of evolution, as determined by an examination during the week surrounding Darwin's birthday on 12 February.

However, opposition to the theory of evolution was noted in several of the examined newspapers, such as *ABC*, and was invariably linked to religion. The religious supplement of *ABC*, *Alpha y Omega*, advanced a creationist view and defended the existence of a Creator. Meanwhile, although *Diario Ya* and *La Razón* evidently do not support evolution, neither did they advocate creationist ideas as an alternative.

Our research also showed that *Público*, in particular but also *El Mundo* and *La Vanguardia*, devoted a relatively large amount of attention to Darwin's anniversary. *Público* and *El Mundo* both have a daily science section, and its journalists have scientific expertise. The Catalan paper *La Vanguardia* has a broad-ranging section, *Tendencias*, which, during the study period, in addition to containing opinions on evolution and creationism, in-



Fig. 1. Cartoon by Forges published in *El País* (30/03/09)

cluded features on Darwin himself. The newspaper sought to maintain a balanced and didactic approach, as shown by the tone adopted in the text and by the use of graphics to improve understanding.

In second place in terms of amount of space devoted to the Darwin Year were the newspapers belonging to the Vocento group (*ABC*, *Diario Vasco*, *Las Provincias*, and *El Norte de Castilla*). In all of them, the related content took a more social approach, preferring to discuss Darwin as a historical figure. However, these newspapers cannot be considered individually as they belong to the same editorial group and at times share content. Nonetheless, Vocento clearly recognized the anniversary of Darwin's birth as an event worth celebrating and thus gave it considerable coverage, despite its conservative political position on the journalistic map.

Paradoxically, the response of the Vocento group contrasts with the regional paper *Levante-EMV* which, despite its progressive nature, devoted only one article, in its weekly science section, to the 200th anniversary of Darwin's birth. The same holds true for *El País* which, although it is Spain's most prominent newspaper, during the period analyzed dedicated only two news items to Darwin, accompanied in the *Quadern de València* by two opinion articles. Still, it is noteworthy that one of these two items appeared in a privileged position, on the editorial page, with the newspaper expressing its support of evolution. In this sense, it is the only newspaper to have taken an editorial stand. It should also be said that during 2009 *El País* provided extensive coverage to related events, with reports in both the cultural supplement *Babelia* and the paper's culture section. The positive attitude to Darwin's anniversary



Fig. 2. Cartoon by Forges published in *El País* (21/02/09)

was complemented with drawings by the cartoonist Antonio Fraguas (alias Forges), who in a series of cartoons poked fun at the relationship between Darwin and Spanish society, especially reflecting the conflict of his work with religious thought (Figs. 1, 2). *Diario Ya* and *La Razón* also published only two news items related to Darwin during the week under study, one of which—in each case—came from news agencies.

What becomes evident, beyond the specific position of each newspaper, is that, in the Spanish press, the theory of evolution is still strongly associated with religious controversy. This was clearly apparent on the bicentenary of Charles Darwin's birth, by the nature of the coverage granted the occasion. It should also be pointed out that in this case the media has played a somewhat unusual role, as in the field of science newspapers seldom feel compelled to voice their opinion on a particular subject. The fact that in this case they did so is indicative of the importance of the theory of evolution in current thought but also of the controversy in Spanish society that, 150 years after the publication of *On the Origin of Species*, continues to surround it.

References

- [1] Dawkins R (2006) *The God Delusion*. Bantam Press, London
- [2] Domínguez M (2008) Introducción. In: Carmen Pastor (trad) Charles Darwin. *La fecundación de las orquídeas*. Laetoli, Biblioteca Darwin I, Pamplona, 7-25
- [3] Elías C (2007) *Fundamentos de periodismo científico y divulgación mediática*. Alianza, Madrid
- [4] Ghiselin M (1969) *El triunfo de Darwin*. Ediciones Cátedra, Madrid
- [5] Glick TF (1974) *The comparative reception of Darwinism*. The University of Chicago Press, Chicago and London
- [6] Gomis A, Josa J (2002) Iconografía Darwiniana en España. In: Puig-Samper MA, Ruiz R, Galera A (eds) *Evolucionismo y cultura*. Junta de Extremadura, Universidad Autónoma de México, Doce Calles
- [7] Gomis A (2008) Las ideas de Darwin en España, hasta su fallecimiento en 1882. *Boletín de la Institución Libre de Enseñanza*, 70-71:174-187
- [8] Gould SJ (1999) *Rocks of ages: Science and religion in the fullness of life*. Ballantines books, New York
- [9] Moreno C (2004) La información científico-técnica. In: Fernández del Moral J (coord) *Periodismo especializado*. Ariel, Barcelona
- [10] Pelayo F (2002) Repercussions of evolutionism in the Spanish natural history society. In: Glick TF, Puig-Samper MA, Ruiz R (eds) *The reception of Darwinism in the Iberian World*. Kluwer Academic Publishers, Dordrecht, Boston & London
- [11] Spencer N (2009) *Darwin and God*. Society for Promoting Christian Knowledge, London

About the Authors

Esther Díez has a B.A. in Journalism from the University of Valencia. Co-worker on the popular-science journal *Mètode*, she is interested in the field of scientific communication, particularly the way in Darwin's ideas are portrayed in the media.

Anna Mateu has a B.A. in Journalism and a Diploma in Advanced Studies from University of Valencia. She is Head of the Editorial section of the popular-science journal *Mètode*. Her research focuses on various aspects of scientific communication and she is currently preparing her Ph.D. thesis on environmental journalism.

Martí Domínguez has a Ph.D. in Biology and is Professor of Journalism at the University of Valencia. He is Editor-in-Chief of the popular-science journal *Mètode* and the *Biblioteca Darwin*, published by the University of Navarra and Laetoli editorial. His research focuses on different fields of communication, especially popular science and essays.